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The American STATISTICIAN

DECEMBER 1949, VOL. III, NO. 5

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FIRST REPORT OF THE COMMITTEE ON COMMITTEES

The Committee on Committees reported to the Board of Directors of the Association on October 29, 1949, on its first recommendations concerning the committee structure of the Association.

The Board approved, with slight modifications, the following recommendations of the Committee which now become the policy of the Association:

1. *General principles to be followed in the appointment of committees.* The following general principles are recommended to govern the appointment and operation of committees by the Association except where otherwise provided by the Constitution:

A. *Membership.* For standing committees, terms of office should generally be 3 years, with one-third of the committee retiring each year and no member of any committee serving for two successive terms. Longer terms of service for members of particular committees may be provided with the approval of the Board of Directors. Representatives of the Association on boards of other associations and liaison officers with other societies should also serve for limited terms of not to exceed 3 years. The President-elect should designate members of the committees for the ensuing year prior to the annual meeting, so that meetings of the committees may be convened at the annual meeting and the members may have, in effect, a full term of office in the calendar year. In making appointments, due account should be taken of geographical distribution and of representation of the various age groups within the Association, with a view to increasing the participation of the younger members of the Association in its committee activities.

B. As a general rule no member of the Association should serve simultaneously on two standing committees, with the possible exception of the Program Committee, the Committee on Publications, or other committees in which membership is otherwise specified in the Constitution.

Alternates should be designated for Association representatives or for liaison officers with other societies. These alternates should gain sufficient experience to be able to serve in the event of the absence of the designated representative.

C. All committees and Association representatives shall submit annual reports to the Secretary of the Association on his request, sufficiently far in advance of the annual meeting so that they may be published in the *American Statistician* and may thus be available to the members of the Association prior to each annual meeting.

D. In the event that a committee not specifically provided for in the Constitution has completed its assignment or has not found it advisable to meet within a period of two years, it shall be discharged.

2. *Advisory committees to governmental organizations.*

The American Statistical Association shall appoint committees to advise governmental or other agencies on technical statistical matters, as requested by responsible officers of such agencies, when the subject matter is found by the Board of Directors to be of wide public importance and therefore to warrant the attention of the Association. It should be the policy of the Association to encourage requests for such committees in order that governmental and other research agencies may have the benefit of disinterested technical advice from time to time.

These committees may be either standing committees of a general advisory character or special committees dealing with particular subject matter, depending upon the needs of the agency. The special

CONTINUED ON PAGE 9

Entered as second class matter March 11, 1938, at the post office at Washington, D. C., under act of March 3, 1897. The *American Statistician* is published five times a year—February, April, June, October and December—by the American Statistical Association, Editorial Office: 1603 K Street, N. W., Washington 6, D. C. Subscription rate: one dollar and fifty cents a year or twenty-five cents per copy.

NEWS

Annual meeting news—1949 summer meetings in Switzerland—Royal Statistical Society account of U. K. statistics—Statistical job in Geneva—BLS report on comparative international food purchasing power—New training centers

International Association for Research in Income and Wealth

The International Association for Research in Income and Wealth was organized in September 1947 by the statisticians attending the Washington meetings of the International Statistical Institute. Scholars actively working in these two fields were invited to become members. At the present time, the membership numbers 115 scholars residing in 35 countries.

In August 1949 the International Association held its first biennial conference to discuss technical papers contributed by its members. The discussion was centered around three general subjects: (1) the theory of social accounts and recent experiences in the use of social accounting in formulating public policy in Sweden, Norway, Netherlands, France, Great Britain and United States; (2) problems in the measurement of the government product; and (3) statistical and economic problems in measuring real national income. The International Association plans to publish these conference papers, probably in 1951.

Statisticians interested in the problems or results of measuring income and wealth would probably find the bibliographical services of the International Association useful. Beginning with the first quarter of 1948 the secretariat has issued quarterly in mimeographed form an annotated bibliography of literature relating to the measurement and uses of national income and wealth and related variants. It is compiled from original reports submitted by correspondents in 35 countries. The references are so classified as to distinguish discussions of conceptual problems from actual statistical measurement.

These quarterly reports will supplement an extended bibliography that is now in preparation. The correspondents have submitted lists of annotated references in these two fields that appeared between 1937 and 1947—in the cases of United Kingdom and the United States coverage will extend to 1919. These reports are now being edited and compiled into a single volume which will be published probably late in 1950.

Any inquiry concerning the activities of the International Association should be addressed to the secretary, Miss Phyllis Deane, c/o The National Institute of Economic and Social Research, 2 Dean Trench, Smith Square, Westminster, London S.W. 1, England.

26th Session of the International Statistical Institute

The International Statistical Institute held its 26th session in Berne, Switzerland, September 3-10, 1949. The session was attended by about 250 non-Swiss participants from more than 25 countries in all parts of the world. There were about 30 participants from the United States, including the official United States Delegation consisting of Stuart A. Rice (chairman), Bureau of the Budget; James P. Cavin, Bureau of Agricultural Economics; W. Edwards Deming, Bureau of the Budget; M. Joseph Meehan, Office of Business Economics; Henry S. Shryock, Jr., Bureau of the Census; and Samuel Weiss, Bureau of Labor Statistics.

The program of the Berne session was built around several topics selected by the Bureau of the Institute because of their timely technical interest to statisticians.

Considerable emphasis was given to the use of sampling methods and the industrial applications of statistics, and first steps were taken by the General Assembly toward establishment of a section on industrial applications. Consideration of questions concerning education and training in statistics also occupied an important place in the agenda for the session, particularly in view of plans being developed by the Institute, with financial assistance from UNESCO, for an international program for the improvement of education in statistics.

As part of its statistical education program, the Institute conducted a Statistical Seminar during the two weeks following the 26th session—September 12-17 at Berne and September 19-24 at Geneva. The Seminar was planned to provide refresher courses for teachers of statistics and officials of statistical agencies, and to review well established statistical theory, methods and procedures. The principal topics were measurement of national income and national wealth, the teaching of statistics, industrial applications of statistics, experimental design, and statistical sampling. Faculty for the courses included distinguished experts and specialists in different statistical fields who were present for the Berne session. Members of the American Statistical Association who gave lectures included Besse Day, Gertrude Cox, Chester I. Bliss, W. Edwards Deming, J. B. D. Derksen, Simon Kuznets, and Robert M. Woodbury.

Eight new members were elected by the Institute, including two from the United States—Gertrude M. Cox and William G. Cochran. Stuart A. Rice (United States) and Jan Tinbergen (Netherlands) were reelected, respectively, as President and Secretary-General, and R. G. D. Allen (United Kingdom) was elected Treasurer to succeed A. L. Bowley (United Kingdom), who wished to retire. The following vice-presidents were reelected: P. C. Mahalanobis (India), J. L. Rueff (France), E. Szturm de Sztrem (Poland), and G. Jahn (Norway). The Institute unanimously accepted the invitation of the Indian government to hold its next session in New Delhi in 1951.

Union Internationale pour l'Etude Scientifique de la Population

The Fifth Session of the International Union for the Scientific Study of Population was held at Geneva, 27 August - 2 September, 1949. This was the first assembly of the Union since its reorganization at the time of the World Statistical Conferences in Washington, September 1947. At that time the structure of the Union was changed from an organization of autonomous national committees to an association of individual scientists.

The Geneva program included sessions on problems relating to the cultural assimilation of immigrants, organized by special request of UNESCO. Other scientific sessions were concerned with applications of "cohort analysis", scientific sampling in population studies, factors influencing natality, and the relation of technological progress to population changes especially in countries chiefly agricultural.

The Assembly voted to apply for affiliation with the International Statistical Institute and with the International Council of Scientific Unions. It was also voted to offer the assistance of the Union to the Secretariat of the United Nations in work preparatory to the compilation of an international dictionary of demographic terms.

ANNUAL MEETING NEWS

Economics Section of the ASA proposed To be discussed at the Annual Meeting Tuesday, December 27, 1949, 2-4 P. M.

The present stage of organization of an Economics Section in the American Statistical Association may be said to have had its origin in a series of conversations which were undertaken with a quite different purpose in view. Those conversations, in the early summer of 1948, uncovered evidence of a strong and nearly unanimous dissatisfaction among economic statisticians with the representation which their interests were receiving in the Association. The situation was reported to President Snedecor, who recommended that steps be taken toward organization of an Economics Section. President Kuznets, early in his administration, made the same recommendation. Steps were thereupon taken to explore membership sentiment on the subject.

ASA opinion was sampled systematically by directing a questionnaire to all Fellows of the Association and to the President, Vice-President and Secretary of each Chapter of the Association. The questionnaire was accompanied by a statement, prepared through the cooperation of about a dozen prominent members of the Association, which undertook to state briefly the grounds for considering establishment of an Economics Section.

The group of 224 members of the Association to which the questionnaire was directed did not, of course, constitute a wholly representative sample of the membership. The group should be regarded, rather, as a large segment from among the more prominent, active and well informed members.

Of those who responded to the questionnaire by early November, 93% favored the organization of an Economics Section; 80% indicated a desire to affiliate with such a Section; a large proportion of those consulted favored the

combination of business and economics in one Section and the majority of those queried expressed themselves in favor of the election of Section officers by direct vote of the Section membership.

A full report on the questionnaire and plans for the possible organization of an Economics Section will be discussed in full at the New York meeting.

Committee on Resolutions for the 1949 annual meeting

Those members of the Association who wish to present resolutions to the annual business meeting of the Association to be held in New York on Tuesday, December 27, 8-10 p.m., should send copies of the resolutions to be introduced to the Office of the Secretary, 1603 K Street, N. W., Washington 6, D. C., for transmission to the Committee on Resolutions. Any resolutions which cannot reach the Secretary before the 23rd of December should be addressed to Mr. Samuel Weiss, ASA headquarters, Biltmore Hotel, New York, New York, for transmission to the Committee on Resolutions in New York.

Agenda for the open business meeting of the Association

1. Report of Committee on Fellows
2. Report of Board of Directors
3. Report of Secretary
4. Report of Committee on Committees
5. Report of Elections Committee
6. Introduction of new officers
7. Report of Resolutions Committee
8. Discussion of Future of ASA Sections
9. New Business

Plans for the next session of the Union were referred to the Executive Council.

Arrangements were made to continue the Administrative Office of the Union in Washington (c/o The American University, Washington 16, D. C.) with Dr. Frank Lorimer, Director.

The following officers were elected to serve until the next meeting of the Assembly: President, L. Hersch (Switzerland); Vice-Presidents, Messrs. D. V. Glass (United Kingdom), L. Livi (Italy), A. J. Lotka (U. S. A.), K. B. Madhava (India), G. Mortara (Brazil), A. Sauvy (France), S. Szulc (Poland); Secretary General and Treasurer, G. Mauco (France).

Second International Biometric Conference

The Second International Biometric Conference was held last summer at the University of Geneva, Switzerland, under the sponsorship of the Biometric Society. The 102 scientists from 19 different countries who signed the register included 21 official delegates from eight governments, from international organizations, from academies of science and from other scientific and governmental bodies. The Conference opened on August 30 with welcoming addresses by Professor Tiercy, Rector of the University of Geneva, and Professor Franceschetti of the Faculty of Medicine, who served as Chairman of the Conference Committee.

The Conference held seven scientific sessions. The first of these on experimental design offered papers by Professor Gertrude M. Cox and Mr. M. H. Quenouille. The following day Drs. F. Yates, L. L. Cavalli and D. J. Finney spoke in the morning on recent applications of biometrical methods in genetics and in the afternoon papers by J. O. Irwin and W. L. M. Perry dealt with biometrical aspects of biological assays. The sessions on September 1

concerned the present status of biometry with the leading paper by W. G. Cochran and industrial applications of biometry with O. L. Davies as the principal speaker. On September 2, M. S. Bartlett reported on teaching and education in biometry and the scientific program closed with contributed papers in the afternoon by A. Rapaport, E. Boeri, D. Schwartz and C. A. G. Nass. It is hoped to publish these papers in full or in abstract with the discussions which followed them in "Biometrics" during 1950.

The business sessions of the Conference discussed at length the proposal that UNESCO establish an international computation center and passed a resolution favoring further consideration of the project with proper safeguards for the needs of statistics. Another resolution recommended that students of science, education and administration be brought into contact with the concepts of probability and statistics early in their collegiate training. A resolution at the closing session commended especially the work of Professor Arthur Linder, who served as Secretary of the Conference Committee. Many of those attending took advantage of the special train which he arranged to travel through Alpine scenery from Geneva to Bern to attend the meetings there the following week of the International Statistical Institute. Two Council meetings considered questions arising during the Conference and discussed at length the need of the Society for its own publication.

Dr. Alfred James Lotka, past President of the American Statistical Association and assistant statistician (retired) of the Metropolitan Life Insurance Company, died at his home in Red Bank, New Jersey, on December 5, 1949, after a short illness. He was 69 years old.

A New Statistical Project

By M. G. Kendall, Professor of Statistics
in the University of London

When the Royal Statistical Society laid down a syllabus for the examination for its Certificate two or three years ago, one of the subjects prescribed was a knowledge of the scope of official statistics. It was felt that part of the equipment of the ordinary working statistician ought to be a broad acquaintance with the existing statistical information concerning the social organization and the economy of his country. He could not be expected to know everything; but he might reasonably be expected to have a general idea of what was known and where to find the available information. Naturally enough, this led to requests from candidates, many of whom were studying extramurally, to be told where they could acquire this information. We were unable to refer them to any systematic account of the subject or to give them a simple course of reading. We advised them to study the Statistical Digest published by the Central Statistical Office and to consult papers on individual branches of industry and commerce published in the Journal of the Society (Series A and Series B) and elsewhere; but this was only a makeshift and served mainly to emphasize the importance of filling an important gap in statistical literature.

The absence of any comprehensive account of the statistics of the U. K. economy has led the Society to embark on a new project under which a series of papers is to be issued on the economic and sociological statistics of the U. K. Each paper will be written by an expert in the field concerned (in many cases by men who have spent most of their lives working in those fields) and will aim at giving an account of what information exists, how it is collected and what are the major pitfalls in its interpretation. In other words, it will be a critical survey of the field, not merely a schedule of references to sources.

The following papers have already been published or are in the press:

1. "Statistics of the U. K. Shipping Industry", by M. G. Kendall, formerly Statistician to the Chamber of Shipping of the United Kingdom
2. "Medical Statistics", by Major Greenwood, Professor Emeritus of Epidemiology in the University of London
3. "Statistics of the U. K. Censuses of Production and Distribution", by H. Leak, Statistical Adviser to the Board of Trade
4. "Statistics of the External Trade of the U. K.", by A. Maizels, Principal, Board of Trade
5. "Statistics of the U. K. Coal Mining Industry", by R. F. George, Statistician to the National Coal Board

The papers in the series, which may ultimately number between 30 and 40, fall into three main groups. First, papers on a number of individual branches of industry or commerce such as the woolen textile industry, the sugar refining industry, agriculture and the rubber industry; second, papers on more general economic services such as civil aviation, inland transport, banking and insurance; third, papers on general economic or sociological topics such as national income, justice and crime, public health services and entertainments.

The papers are being published in the Journal of the Royal Statistical Society, Series A, but separate off-prints of each are on sale at the price of 1s. 0d. post free. It is contemplated that when the project is complete the Society will publish a set of papers under one cover. They should form a unique account of the statistical information available concerning economic and social conditions in the United Kingdom.

BLS Division of Foreign Labor Relations publishes 19 country survey of food purchasing power of workers

A study of the purchasing power in common foodstuffs of average hourly earnings in the United States and in the eighteen other countries has just been completed by the Bureau of Labor Statistics. Its results are necessarily

approximate and exploratory, since few countries prepare price and earnings statistics on as precise a basis as does the United States.

The study shows that food purchasing power of workers in the United States was second among 19 countries studied. Only Australian workers ranked higher. The United States was followed by Canada, Norway, Denmark, Great Britain, Sweden, Finland, Switzerland, Israel, Czechoslovakia, Ireland, Chile, France, Hungary, Germany (Bizonia), Austria, and the U. S. S. R.

The report, covering the period from October 1948 to April 1949 includes three indexes: (1) the relative purchasing power of hourly earnings in terms of food; (2) hourly earnings as a per cent of United States hourly earnings; (3) food prices as a per cent of United States food prices. It will be printed in full in the November 1949 *Monthly Labor Review*, monthly magazine of the Bureau.

National Income Inquiry Committee established in India

A three man committee to prepare a report on the national income of India and its various components has been appointed by the Indian Government. Prof. P. C. Mahalanobis, F. R. S., Statistical Adviser to the Indian Government, will be Chairman and Dr. Badgil, head of the Gokhale Institute of Economics and Politics of Poona, and Prof. V. K. Rao, head of the Delhi University School of Economics, will be members. Dr. R. C. Desai of the Ministry of Finance will act as Secretary.

The terms of reference of the committee are to prepare a report on national income and related estimates, to suggest measures for improving the quality of available data, the collection of further essential statistics, and to recommend ways and means of promoting research in the field of national income.

Provisional estimates for 1938-39 and the three years preceding 1948-49 will be prepared, thus enabling a comparison of conditions in postwar years with those prevailing in the last prewar year to be made. The unit is expected to prepare its first series of estimates in approximately 18 months. After that it is hoped that publication of estimates will be an annual event.

Prof. Simon Kuznets of the National Bureau of Economic Research of New York, Dr. N. Stone of Cambridge University, and Dr. J. B. D. Derksen of the U. N. Statistical Office at Lake Success will be advisers to the Committee.

New Economic Review

A new international review of economics, *Metroeconomica*, which will stress the mathematical approach to quantitative analysis in economics, was announced in June, 1949. Edited by Prof. Eraldo Fossati, director of the Institute of Economics of the University of Trieste, and a board which includes C. Bresciani Turrone, Leon Dupriez, Ragnar Frisch, Georges Lutfalla, Alexander Mahr, G. Ugo Papi, Erich Schneider, J. Tinbergen, Gerhard Tintner and F. Zeuthen, it will be published in three numbers a year by the Libreria Licinio Cappelli, Corso 12, Trieste. Subscriptions are \$6.

CORRECTION

In the October article on Moving Averages, the labels on Chart I were inadvertently switched. Also, in the third line of the last column the word "times" was an accidental transposition of the intended word "items".

FAO Statistics Centre in Paris

As an aid to European governments in improving their collection and analysis of statistics relating to agriculture and population, the Food and Agriculture Organization is sponsoring a three-month European Centre of Applied Agricultural and Demographic Statistics in Paris beginning 26 September and continuing to 22 December 1949.

The Statistical Office of the United Nations and the French Government have joined with FAO in organizing the Centre. The United Nations Educational, Scientific and Cultural Organization is cooperating.

Staff members from government statistics departments attending the Centre will receive training designed to assist them in adapting their operations to the use of modern techniques.

Instruction at the Centre will have two principal objectives. One will be to improve the statistical documentation of the participating governments; the other will be to foster methods of statistical compilation which will allow for better international comparability of statistics.

The European Centre will be directed by Mr. G. Darmais, Director of the Statistical Institute, Paris, and members of the United Nations Statistical Commission. Mr. Chombart de Lauwe, representing FAO, will be Deputy-Director. An advisory committee of European statisticians will supervise the scientific value of the training given. Teachers at the Centre will be recruited from the best statisticians of European countries, particularly those familiar with the operational problems of modern statistical services. Additional instructors are being provided by FAO and the UN Statistical Office.

Training offered in Asia

The Indian Government invited member countries of the Food and Agriculture Organization in Asia and the Far East to send census officials for training in October, 1949, at a Statistical Training Center in New Delhi, by experts. The center is directed by a board consisting of Prof. P. C. Mahalanobis, founder of the Indian Statistical Institute, Calcutta, chairman; M. Yeats, Census Commissioner of India, and P. V. Sukhatme, statistician of the Indian Council of Agricultural Research, executive secretary.

New output index decreed in Soviet

According to Harry Schwartz, writing in the New York Times of November 27, 1949, "The Soviet Government has ordered abandonment of the much criticized method of calculating industrial production in terms of 1926-27 prices and its replacement by a new index based upon current wholesale prices.

"This shift was ordered in a decree of the Council of Ministers adopted July 28, 1948, and hitherto unpublished, it is disclosed in the Soviet textbook, 'A Course of Industrial Statistics,' by Prof. D. V. Savinski, published in Moscow this year by the State Planning Committee's publishing house.

"Since the late Nineteen Twenties, Soviet gross industrial production figures used for planning and propaganda purposes have been obtained by multiplying the amount of each article produced by its price in 1926-27. Dr. Savinski indicates this is to be replaced by a method based on valuation of production in current wholesale prices. The value of output in current prices is divided by an index of wholesale prices to obtain an index of the physical volume of production unaffected by price changes from year to year.

"Neither Dr. Savinski's book or other published Soviet sources have yet indicated whether this new method is now being applied. Dr. Savinski says in his book that the new technique requires the construction of a price index, which he terms 'a complicated task whose solution requires careful preparation,' thus indicating that no satisfactory Soviet wholesale price index existed at the time he wrote, last year.

"No data have been released to date showing the results obtained by applying the new index to current production. Soviet statements about industrial output for the past several years have been confined to citation of percentage increased with regard to the previous year or 1940."

ASA members in Canada

ASA members in Canada may pay their 1950 membership dues to the Assistant Treasurer for Canada, Mr. Herbert Marshall, Dominion Statistician, Dominion Bureau of Statistics, Ottawa, Canada, in the event that they are unable to obtain American dollars for transmission to the United States.

Committee on Fellows membership change

Henry B. Arthur has resigned as a member of the Committee on Fellows. President Kuznets has appointed Morris A. Copeland to fill Mr. Arthur's unexpired term.

Position available with ILO in Geneva

A post for a research assistant in the Statistical Section of the International Labor Office in Geneva, Switzerland, is now open for United States citizens, between the ages of 21 and 30.

The position requires a thorough grasp of statistical theory and practices, with ability to apply statistical methods to problems in labor statistics, and some experience in statistical research or in routine statistical operations.

In addition to English as the mother tongue, a good knowledge of French is required.

The salary offered ranges from \$3210 to \$4410, free of Swiss income tax.

Those interested should apply, stating their qualifications in full, to the Washington Branch of the International Labor Office, 1825 Jefferson Place, Washington 6, D. C.

Fellowships in Psychometrics

The Educational Testing Service is offering for 1950-51 its third series of Research fellowships in psychometrics leading to the Ph.D. degree at Princeton University. Open to men who are acceptable to the Graduate School of the University, the two fellowships each carry a stipend of \$2,375 a year and are normally renewable.

Fellows will be engaged in part-time research in the general area of psychological measurement at the offices of the Educational Testing Service and will, in addition, carry a normal program of studies in the Graduate School. Competence in mathematics and psychology is a prerequisite for obtaining these fellowships. Information and application blanks may be obtained from: Director of Psychometric Fellowship Program, Educational Testing Service, Box 592, Princeton, N. J.

National Teacher Examinations

The National Teacher Examinations, prepared and administered annually by Educational Testing Service, under sponsorship of the American Council on Education, will be given at testing centers throughout the United States on Saturday, February 18, 1950.

At the one-day testing session a candidate may take the Common Examinations, which include tests in General Culture, Mental Abilities and Basic Skills, and Professional Information; and one of eleven Optional Examinations, designed to demonstrate mastery of subject matter to be taught. The college which a candidate is attending or the school system in which he is seeking employment will advise him whether he must offer the National Teacher Examinations and which of the tests he should take.

Application forms, and a Bulletin of Information describing registration procedure and containing sample test questions, may be obtained from college officials, school superintendents, or directly from Educational Testing Service, P. O. Box 592, Princeton, New Jersey. A completed application, accompanied by the proper examination fee, should reach the ETS office not later than January 20, 1950.

Notes on Federal-State Relations in Statistics

With illustrative reference to Employment, Unemployment and the Labor Market

by MEREDITH B. GIVENS

New York State, Division of Placement and Unemployment Insurance
Consultant to the Division of Statistical Standards

The general area of joint federal-state statistical development has not been systematically explored. The present article is based on notes requested in connection with the recent task force report on federal statistical agencies prepared under the auspices of the National Bureau of Economic Research for the Hoover Commission on Organization of the Executive Branches of the Government.

The important role of state and local governments in the development of statistical information of national significance was recognized by the Committee on Government Statistics and Information Services (COGSIS) in the following recommendation (1937):

"When basic data of national concern are a product of state or local administration, the original collection of such data usually should be state or local, provided that the federal agency most directly concerned can, by grants-in-aid or other sanctions, develop standards of quality and uniformity and promote necessary extensions in subject matter, and coverage." (*Government Statistics*, Bulletin 26, Social Science Research Council, p. 28.)

Statistical experience since the Committee's report has given further emphasis to the soundness of this recommendation.

The federal government is engaged in a wide variety of highly productive statistical activities which are based upon the cooperation of state governments. This cooperation may be on a voluntary basis, or it may be mandatory. The Committee cited the fields of employment, vital statistics, health, social welfare, accidents, marriage and divorce, and criminal statistics. This list could now be greatly extended. Extensive experience in the field of agricultural statistics, for example, offers a rich background for evaluation.

Federal agencies with statutory powers to require reports from state agencies are in a preferred position for the articulation of state-derived data into national statistical programs. In such cases it is approved practice for state compliance with federal reporting requirements to be a necessary prerequisite to finan-

cial support of state programs by federal agencies.

Voluntary reporting to federal agencies by state agencies may be supplemental to required reports or altogether unrelated to authoritative relationships. State agencies are unique sources of information on their own operations. They supply a great volume of information on their activities upon request of federal statistical offices. Particularly important for careful development and coordination are those fields of statistical work in which states and federal agencies have interdependent responsibilities. Here there is opportunity for close cooperation and coordination, often with the state acting as collecting agent. Without such coordination there is serious danger of wasteful duplication of work, conflicting data, and bad relations with respondents and the public.

As pointed out by the COGSIS report in 1937, the expanding activity of federal and state governments in the various phases of social insurance has opened up a wide field for statistical development. Many of the problems of state-federal statistical relations are now well illustrated by more than a decade of statistical experience in the area now known as "employment security" with its two phases of insurance and public employment service. The remainder of this paper will deal with aspects of this field as illustrative of those relationships which it is believed, should be explored in other fields as well.

Federal responsibilities in employment security are vested in the Bureau of Employment Security (BES) of the United States Department of Labor. This agency collects reports from 51 state and territorial employment security agencies under authority of the federal Social Security Act. The state agencies operate in varied administrative settings and maintain technical and consultative relationships through the Interstate Conference of Employment Security Agencies. Basic data on employment and payrolls is collected from business establishments by state agencies for administrative and program purposes in part under nationwide specifications of BES, in part under a cooperative state-federal plan sponsored federally by BES and another arm of the Department of Labor, the

Bureau of Labor Statistics (BLS), and partly with wide latitude of local discretion. Other phases of employment security statistics are required of the states by the Veterans' Administration in connection with the state administered unemployment allowance and unemployment service program for veterans. Employment statistics are also developed by the Bureau of Old-Age and Survivors Insurance (BOASI) of the Social Security Administration, Federal Security Administration. The statistical work of employment security agencies, in turn, is now increasingly involved in the wider patterns of labor statistics developed by federal and state agencies.

In the operation of these statistical programs many technical issues of concept, operation and end-product data arise which relate to the work of the Bureau of the Census, various research units of the Department of Commerce, the Railroad Retirement Board, and, generally speaking, the interests of all federal agencies which collect or utilize the employment information and related data. Reports on state employment security operations are a direct federal responsibility of BES. This field is subject, of course, to the broad coordinating responsibility of the Division of Statistical Standards (DSS), Bureau of the Budget.

In this complicated field a decade of experience has witnessed tremendous expansion of reporting, statistics, and their applications. The record is one of experiment and negotiation, cooperation and conflict, struggle and compromise, as the interrelated activities have passed through successive stages of depression and work shortage, recovery, war, reconversion, and, more recently, precarious prosperity. From the statistical experience in this field it is now possible to suggest a few broad principles which may have implications for other fields of federal state statistical relations as well.

Federal agencies with coordinate or overlapping statistical jurisdictions among themselves and with state agencies, should invariably agree on uniform standards for similar reporting items to facilitate state and federal summaries and to avoid friction and waste of effort.

Performance in these respects has often deviated from desirable practice. Tremendous effort has been required to repair damage resulting from uncoordinated development of various aspects of employment reporting: Continued vigilance is required to avoid losing ground in areas where uniform standards are once attained.

National reporting requirements should represent as accurately as possible the blended administrative, informational and research needs of state and federal agencies.

Unnecessary deviations in reporting specifications lead to costly duplication of work within the agencies of original collection. Wise reporting standards will promote sound uniformity and comparability of state reports if the standards are grounded on knowledge of collection procedures and experience with sources. Extensive technical conference among state and federal personnel is indispensable for sound integration.

Federal competition with state agencies should be avoided in the conduct of statistical programs.

Where state procedures fit into a sound and cooperatively developed pattern, the cooperating states are usually entitled to a clear priority in release of state and local data. This does interfere with the unique responsibility of federal agencies for national data and its interpretation.

Conflict over statistical jurisdiction among federal agencies is harmful to good federal-state statistical relations. Such conflict should be compromised or eliminated in the best interests of broad statistical programs.

This is best done by clear recognition of focal agencies with coordinating responsibilities specialized in subject matter fields within the federal government. Such focal agencies should assume key responsibilities for determination and application of the overall pattern of the federal-state flow of information in their fields.

It is an important responsibility of DSS to see that no major producer of employment statistics is permitted prerogatives which are disruptive of an overriding scheme of systematization.

The relative significance of employment, unemployment and labor force information currently derived by the use of different methods of collection should be closely studied by the federal government, by the states, and by qualified private research interests. Definitions and concepts should be coordinated. This is important if confusing statistical results and wasteful duplication are to be avoided.

Labor force and labor market statistics are currently obtained from three principal types of original sources, viz.:

- (1) establishment reports collected from employers;
- (2) administrative records of public agencies;

and (3) enumerator visits to individual households. Experimental comparative analysis of the alternative methods of labor market measurement should be undertaken over a period of time under controlled conditions in order to identify and evaluate the most economical and effective methods of obtaining needed information. Methods and merits of obtaining statistical data as a by-product of administration, and the program applications of by-product data, should receive further study. This evaluative work will be timely if well advanced before periods of rapid economic change or possible emergency. Such investigation should explore the supplemental advantages of various methods as phases of an over-all approach to labor market measurement.

It is now possible, under given business conditions, that sample estimates based on household visit data can indicate a smaller number of persons unemployed than the number actually off payroll and drawing unemployment insurance benefits for the same period. Such discrepancies can be avoided by further discrimination and adjustment in the application of definitions and concepts.

State agencies are especially well suited to develop statistical data for local areas, especially in the case of data on the labor market. Federal agencies should encourage and give financial support to such work when conducted in conformity with carefully developed standards to assure comparability and adaptability to needed national aggregates.

Responsible state agencies are in closer touch with local conditions and personnel than federal agencies. They have a special stake in the development of local data. Their work gains additional prestige in most cases by collaboration with federal agencies, while duplication of effort is avoided and local goodwill is gained by this means.

Research and statistics units of state employment security agencies should be the preferred agencies at state levels for the collection of labor market data and development of employment and unemployment estimates under federal-state programs, except where well established statistical units of state labor departments have had outstandingly satisfactory long-term cooperative relations with BLS and effective relations with state employment security agencies in the development of employment statistics.

Preference for federal-state arrangements is now given to such agencies wherever possible. This permits to such agencies wherever possible. This permits flexible use of comprehensive data on insured employment in conjunction with current collection of sample

data under the auspices of unified state agencies. Every effort should be made to insure comparability and avoid local dispute in the official release of state and local data measuring the same phenomena.

Federal financing of statistical activities conducted by state agencies should be planned and managed so as to assure needed stability of operations, high quality of responsible personnel and effective initiative at the state level.

Earmarking of funds for minimum state statistical programs required for national purposes may be advisable when necessary to prevent diversion of such funds to other administrative or program uses by the states. Great care must be exercised that such earmarking should build up and not weaken independent state initiative and responsibility for statistical work in subject matter areas which extend far beyond federal needs. Participation of "pure" statistical agencies in state programs—i.e., those which exercise no regulatory or budgetary controls—will often be constructive. Financial responsibilities for general administrative programs involving federal state cooperation may be inconsistent with the needed protection of statistical work as such, especially when budgets are being restricted.

Thorough study of state statistics and federal-state statistical relations should be undertaken by the Division of Statistical Standards, the Bureau of the Budget.

The importance of state statistical cooperation with the federal government justifies a systematic exploration of this large field. At present the federal government is not well informed with reference to state statistics except through the personnel of specialized agencies. Best practices in a given area of work should be extended into other areas, and unsound developments in some fields should be consciously avoided in others. A broad evaluation of federal-state relations in statistics by a central federal agency should contribute to better understanding, sounder policies, wider utilization of available facilities, greater economy and improvement of statistical work. Selected state personnel should participate in such evaluation.

Federal standards to govern state reporting should be determined only after thorough consultation with state technicians. Consultation through organized representative groups of state technicians is advantageous.

The advantages of conference are obvious. Federal personnel at centralized points, even with supporting services of field representatives, cannot be sufficiently expert on details of state operations to support ac-

curate determinations of reporting standards independently arrived at. Since quality of state reporting depends upon quality of state cooperation, there is great advantage in the facilitation of contact between technicians at the several levels of government.

Regular programs for interchange of directive, supervisory and line professional personnel between federal and state agencies, and among state agencies should be fostered.

Inter-agency exchange of professional personnel is one of the best ways for dissemination of "best practices" and for effecting technical coordination of programs over a long period of time. Exchange of professional personnel is an established procedure in the academic field, and probably presents no insurmountable obstacles in technical fields in government statistics. Possible arrangements by federal and state civil service and state merit systems should be explored to this end.

Committee on Committees

CONTINUED FROM PAGE 2

committees should be prepared to issue a public report, including a summary in the publications of the Association, so that the general public may have the benefit of their observations. In the case of a standing advisory committee, where recommendations are of a continuing character, the degree of detail involved in publication may be at the option of the requesting agency. However, these standing committees should prepare a report of their principal recommendations for publication in the journals of the Association.

The agency requesting advice should be prepared to defray expenses involved for members of the committee.

3. *Functions of the Commission on Statistical Standards and Organization.*

The primary purpose of the Commission on Statistical Standards and Organization shall be to further higher standards in statistics.

The Commission should have rotating membership based on a 6-year term; one-third of the initial membership to be appointed for 2 years, one-third for 4 years, and one-third for 6 years. Election should be made by the Board of Directors after consultation with the Commission. It shall have the right to appoint ad hoc subcommittees of specialists to carry out its projects.

The functions of the Commission should be:

A. To provide a tribunal to render opinions and recommendations on controversial issues relating to standards employed in statistical procedures and presentation of statistical material.

B. To develop a list of minimum standards for published statistical materials.

C. The Commission may undertake to review controversial questions relative to statistical validity or proficiency, when asked for advice or a report on such questions by governmental or other research bodies, or a group of interested citizens.

It may review proposed undertakings and make recommendations relative to standards when requested by a government agency, a recognized research body, or a group of interested citizens.

The Commission shall not, as a rule, undertake any new project without approval of the Council except in emergencies, when the Board of Directors may pass upon the project. It may undertake investigations of projects or of statistical standards only in those instances where the public interest, domestic or international, is concerned. It shall consider the advisability of investigating such matters with a view to pointing out to the public such inadequacies of technique and presentation as it may find.

D. The Commission should eventually develop a code of ethical practices in statistical work.

* * * * *

The Committee still has under consideration the section committees and the review of functions of other existing committees of the Association, together with problems of the committee structure of the Association for the future.

The Committee will report to the Council at its annual meeting on the standards for the election of fellows referred to it under a resolution passed at the last annual meeting.

Since the Committee on Committees is a standing committee, charged under the Constitution with broad responsibility for the periodic review of the functions of the committees of the Association, there will be continuing reports to the Association at intervals. The Committee on Committees will greatly appreciate any comments from the membership with reference to the addition of committees which it would seem advisable to create, or other changes in the structure of the Association's committees.

ARYNESS J. WICKENS, *Chairman*
JOSEPH BERKSON
R. W. BURGESS
HENRY CHAUNCEY
WALTER A. SHEWHART
HELEN M. WALKER

QUESTIONS and ANSWERS

edited by **FREDERICK MOSTELLER**

Harvard University

Question 22. My Marketing Research class is doing a readership survey for a local newspaper, as a class project. The publisher issues a morning and evening paper, and the survey is for the purpose of determining dual readership. Carrier lists of subscribers are available as the universe from which a random sample may be drawn.

The problem is this: 1) If a random sample of 600 interviews (extent of available student time) is drawn, the time required to reach respondents becomes excessive and the problem is beyond us. 2) If a random sample is taken of 40 clusters of 15 subscribers each, then the subscribers will be grouped (a section of the carrier's route) in such a way as to enable us to complete the job. 3) In 2) above, each carrier's list of subscribers will be set up into clusters as:

Item	Carrier	Subscribers
1	1	1 - 15
2		16 - 30
3		31 - 45
4		etc.
etc.	21	11 - 25
63		26 - 40
64		41 - 55
65		etc.
etc.	etc.	

Forty clusters, a total of 600 subscribers, will be selected by use of a table of random numbers. 4) Dual readership (that is, subscribers taking both papers) of morning and evening papers is estimated at 20%. 5) We want to use as small a standard error as this plan of sampling would justify.

We would like to know: 1) What will be the proper sample design in the above? 2) What is the standard error? 3) What references will give a good treatment of this type of problem?

Answer. The answers to your three questions are, in order: 1) The design which you suggest, of defining clusters of fifteen subscribers and then selecting a random sample of forty clusters, is adequate for your purposes and conforms to the ideas of probability model sampling. 2) The variance of your estimate of the proportion of dual subscribers will be as follows:

Let p = proportion of dual subscribers in total populations, and p_i = proportion of dual subscribers in the i th cluster of 15 subscribers. Then the variance of estimate of the proportion of dual subscribers is equal to

$$\frac{pq}{(15)(40)} [1 + (14) \rho], \text{ where } \rho$$

is the intraclass correlation coefficient and is defined as

$$\frac{15}{14} \frac{\sum (p_i - p)^2}{M pq} \frac{1}{14}$$

M is the total number of clusters in the population and the summation is taken over all of them. This formula assumes that there are a large number of clusters in the population. 3) Reference: "Relative Efficiencies of Various Sampling Units in Population Inquiries" by Hansen and Hurwitz, J. Amer. Stat. Assoc., March 1942. Formula for ρ given above is the same as theirs, except that they assume M is small (finite population theory). I would expect that ρ would be close to zero for your problem, but you can estimate it after the sample has been drawn.

PHILIP J. MCCARTHY

Question 23. Where may we obtain a relatively complete bibliography on techniques and devices for the presentation of graphic and numerical data?

Answer. On the assumption that the inquiry was meant to cover tabular as well as graphic presentation, I have included two or three tabular reference works in the list below. I have deliberately omitted books that I know are out of print. Most of these are rather old and have largely been superseded by more recent works. It is not intended that this list be exhaustive. The references are presented in reverse chronological order, the most recent being listed first: Smart, L. C. and Arnold, S., *Practical Rules for Graphic Presentation of Business Statistics*, Bureau of Business Research, College of Commerce and Administration, Ohio State University, 1947; Weld, W., *How to Chart*, Codex Book Company, Norwood, Mass., 1947; Hall, R. O., *Handbook of Tabular Presentation*, The Ronald Press Co., New York, 1943; Neiswanger, W. A., *Elementary Statistical Methods*, Macmillan Co., New York, 1943; Brinton, W. C., *Graphic Presentation*, Brinton Association, 608 West 45th St., New York, 1939; *Time Series Charts: A Manual*

of Design and Construction, American Society of Mechanical Engineers, New York, 1938; Moodley, R., *How to Use Pictorial Statistics*, Harper & Bros., New York, 1937; *The Preparation of Statistical Tables, A Handbook*, U. S. Department of Agriculture, Bureau of Agricultural Economics, Washington, D. C., 1937; Arkin, H. and Colton, R. R., *Graphs: How to Make and Use Them*, Harper & Bros., New York (2nd Ed.), 1936; Riggelman, J. R., *Graphic Methods for Presenting Business Statistics*, McGraw-Hill Book Co., New York (2nd Ed.), 1936; Walker, H. M., and Durost, M. N., *Statistical Tables: Their Structure and Use*, Teachers College, Columbia University, New York, 1936; Haskell, A. C., *Graphic Charts in Business*, Codex Book Co., Norwood, Mass. (2nd Ed.), 1928; Bivins, P. A., *The Ratio Chart in Business*, Codex Book Company, Norwood, Mass., 1926; Chadock, R. E., *Principle and Method of Statistics*, Houghton Mifflin Co., Boston, 1924; Karsten, K. G., *Charts and Graphs*, Prentice-Hall, Inc., New York, 1923; Kelley, T. L., *Statistical Methods*, Macmillan & Co., New York, 1923; Haskell, A. C., *How to Make and Use Graphic Charts*, Codex Book Co., Norwood, Mass., 1919; Secrist, H., *Introduction to Statistical Methods*, Macmillan Co., New York, 1917; King, W. I., *The Elements of Statistical Methods*, Macmillan Co., New York, 1915.

KENNETH HAEMER

Suiting the Chart to the Audience

Common Graphic Devices Classified According to Ease of Reading.*

by TRUMAN LEE KELLEY
Harvard University

The talent required in the appraisal of graphic material, though universal, is generally untrained. The necessary training may be quite simple as, for example, the associating of the height of an ordinate with the price or magnitude of something, or the associating of an area under a curve with the number of cases in a sample. Or it may be a little more involved, as when an ordinate must be associated with the logarithm of a magnitude. Clearly there is a direct relationship between the complexity of graphic devices and the extent and technicality of the training called for in their understanding.

The relative ease with which a graphic presentation can be understood is determined not only by its physical form but also by the concept it contains. For example, a simple-appearing chart may be meaningless to the reader because the concept behind it is beyond his comprehension. It is important to remember, therefore, that some of the graphic forms classified in this article as moderately easy to understand must be moved into the "difficult" class when they present difficult concepts.

Of course, certain graphic forms are inseparable from concepts that require

special training for their understanding, and in such cases the relative difficulty is intrinsic. Curves plotted on double logarithmic paper or on probability paper are typical examples of this type.

The table below shows a two-way classification of graphic devices, in which the degree of difficulty was determined primarily on the basis of graphic form but was weighted where appropriate by the relative difficulty of the basic concept behind this form.

In such a brief exposition as this, it has been necessary, of course, to oversimplify the problem. However, even this summary treatment of the subject may be helpful in focusing attention on the important problem of selecting the form of presentation best suited to the training and understanding of the audience.

This problem is more persistently present than generally is realized. Unfortunately, most technicians enjoy the occupational disease of talking at their own level regardless of the level of the audience, forgetting that the audience often is not equally acquainted with the concept presented or with the techniques used to present it. This is an aggravated form of the general weakness for ignor-

ing the fact that persons with only moderately different training and experience frequently see and understand a given presentation entirely differently.

It is true that many forms of presentation, although beyond the training of the reader or listener, can be explained or interpreted to him. On the other hand, intensive excursions from the subject to explain the instrument of presentation are certainly undesirable. Moreover, some of the more difficult graphic forms cannot be explained on the spot, but can be understood only after the reader's mind has been prepared to receive them, step by step, over a considerable period of learning.

There is another argument for not trying to force an advanced graphic form upon the unready reader: surprisingly often, two or more elementary forms can be used to tell essentially the same aggregate story. Whenever the audience cannot be assumed to have the same background or training as the author, this less elegant but often more successful approach should be explored.

*Adapted from "Fundamentals of Statistics" by Truman Lee Kelley. (Harvard University Press—1948.)

COMMON GRAPHIC DEVICES

Relative ease of understanding	Series to Which Applicable			
	Qualitative	Temporal	Quantitative	Geographical and spatial
Easiest to understand as judged (or misjudged) by reader.	Pictorial unit (Pictogram) chart. Circle or Pie chart. Simple Bar charts. Segmented Bar charts.	Pictures showing changes with time, no precise labelling of either axis. Simple time series charts.	Histogram. Frequency Polygon. Simple curve of relationship.	Pictorial Spot Map. Pictograph Map. Distorted Map. Route and Flow Maps.
Of intermediate difficulty, requiring some explanation if presented to an untrained audience.	2-dimensional-Bar charts. Block diagram.	Relative time chart. Composite index or aggregate chart. Growth Curves. Double amount-scale chart.	Simple parallel nomograph. Scatter diagram. Ogive or percentile curve.	Stereoscopic Presentation. Vegetation, rainfall, barometric maps, etc. Coast and Geodetic
Understanding calls for a certain degree of technical training.		Supplementary amount-scale chart. Semi-Logarithmic chart.	Composite nomograph. Mathematically fitted curve. Probability curve. All other charts involving 2 or more variables.	Survey maps. Mercator and other world projections. Navigation and weather maps.

NEWS about MEMBERS

A Captain Samuel V. Anthone has been appointed to the teaching staff of the School for Air Comptrollers at the Air University at Selma, Alabama.

B Isadore Blumen has been appointed professor of statistics at the New York State School of Industrial and Labor Relations, Cornell University.

Ralph A. Bradley has accepted an appointment as assistant professor in the mathematics department of McGill University in Montreal.

C Uttam Chand has been appointed Assistant Professor of Mathematical Statistics at Boston University.

Douglas G. Chapman obtained his Ph.D. degree in statistics at the University of California, Berkeley, and accepted an assistant professorship at the University of Washington, Seattle, Washington.

D Paul M. Densen, formerly Chief, Medical Research Statistics Division, Veterans Administration, Washington, D. C., is now with the Department of Biostatistics, School of Public Health, University of Pittsburgh.

E Mark W. Eudey obtained his Ph.D. degree in statistics at the University of California, Berkeley, and is now Vice President of California Municipal Statistics, Inc.

F M. H. Farrant, formerly with the Occidental Life Insurance Company of California is now with the Northern Life Insurance Company of Seattle, Washington.

Ramona Kuntze First is lecturer in Statistics at Sacramento State College.

Robert W. French, formerly at the University of Texas, is now at Tulane University, New Orleans.

G Bert F. Green, Jr. and Warren S. Torgerson have received reappointments as ETS Psychometric Fellows, for graduate study in psychology at Princeton University.

B. G. Greenberg is now with the Department of Biostatistics, School of Public Health, University of North Carolina.

H Joseph L. Hodges, Jr. has been promoted to Assistant Professor and Research Associate at the Statistical Laboratory, University of California, Berkeley.

Elbert L. Hoffman and William E. Kline have been appointed ETS Psychometric Fellows for 1949-50 for graduate study in psychology at Princeton University, by the Educational Testing Service, Princeton.

K Maurice Kendall has left the Chamber of Shipping and accepted a full-time appointment as Professor of Statistics in the University of London beginning October.

I. R. Kosloff is now in Tel Aviv, Israel, as Fuel Adviser to the Government, Finance Ministry.

L Sebastian B. Littauer, Professor of Engineering Statistics and Quality Control at Columbia University, is now associated with Culpepper Hertz, Inc., management consultants.

H. M. C. Luykx is resigning his position as Associate Professor of Preventive Medicine at New York University College of Medicine to accept appointment as Biometrician for the Atomic Bomb Casualty Commission in Japan. Dr. Luykx will be stationed in Japan for about two years, where he will make his home in Kure, with frequent visits to Hiroshima and Nagasaki.

M Henry B. Mann of Ohio State University has accepted a Visiting Professorship and Research Associateship at the Statistical Laboratory, University of California, Berkeley, for the academic year 1949-50.

William E. Martin, formerly at the Institute of Child Welfare, University of Minnesota, is now connected with the Bureau of Research and Service, University of Illinois.

John M. Mitchell has left the College of Commerce, Tulane University, New Orleans, to join the staff of the American Embassy in Paris.

O. Alexander de Moraes, of Brazil, is in Washington serving as Executive Secretary on the 1950 Census of the Americas of the Inter-American Statistical Institute.

Robert J. Myers, formerly with BLS, Department of Labor, is now Chief of Program Review, Special Mission to France, E.C.A.

N John Neter, formerly at Columbia University, is now with the College of Business Administration, Syracuse University.

J. Neyman, Director of the Statistical Laboratory, University of California at Berkeley, will be on sabbatical leave for the Spring Semester, 1950.

Gottfried E. Noether has been appointed to an instructorship at New York University.

David Novick, formerly with the University of Puerto Rico, is now connected with the Rand Corp., Santa Monica, California.

P Stanley L. Payne and Frank J. Chokel, formerly with the Opinion Research Corporation in Princeton, have formed a new research organization to be known as Special Surveys, located in Cleveland, Ohio.

Howard J. Pincus has completed his studies and is now an instructor in the Department of Geology at the Ohio State University in Columbus.

Charles F. Pinzka is on the staff at Xavier University, Cincinnati, Ohio.

D. Martin Sandelius, who has been in Uppsala, Sweden, is now at the Department of Mathematics, University of Washington.

S Benjamin L. Sander, formerly connected with the Baltimore Smelting Company and the Bendix Aviation Corporation, has been appointed to the staff of the National Bureau of Standards.

Elizabeth L. Scott obtained her Ph.D. degree in statistics at the University of California, Berkeley, and was promoted to Lecturer and Research Associate at the Statistical Laboratory.

Ester Seiden obtained her Ph.D. degree at the University of California, Berkeley, and was promoted to Lecturer and Research Associate at the Statistical Laboratory.

G. R. Seth is going on leave from Iowa State College to visit statistical institutions in England, Sweden, France, and India.

Irving H. Siegel, Chief Economist of Veterans Administration is on leave until June 1950 as lecturer in political economy and member of the Operations Research Office staff at Johns Hopkins University.

Tillman M. Sogge, Chairman, Department of Economics and Sociology, St. Olaf College, Northfield, Minnesota, spent the summer in Tokyo, Japan, serving as Industry and Commodity Classification Consultant in the Research and Programs Division, Economic and Scientific Section, Supreme Commander for the Allied Powers.

Charles M. Stein, Assistant Professor and Research Associate at the Statistical Laboratory, University of California, Berkeley, will be on leave for the academic year 1949-50 and will be working in Paris as a National Research Fellow.

J. Stevens Stock of Opinion Research Corp. has accepted an assignment as Research Consultant to the Bureau of Labor Statistics in charge of revising the Consumer Price Index, formerly called the Cost of Living Index. His assignment will entail a series of studies of consumer expenditures for housing and other purchases. He will have the assistance of committees representing Congress, management, labor, and the American Statistical Association.

Warren S. Thompson was in Japan from January to March. His work dealt with the need for a population policy in Japan, and he was assigned to the Natural Resources Section of SCAP.

Gerhard Tintner, formerly with the University of Cambridge, Department of Applied Economics, is now with the Department of Economics, Iowa State College, Ames, Iowa.

P. K. Whelpton was in Japan from March to June as visiting expert on population problems assigned to the Natural Resources Section of SCAP.

Max A. Woodbury, formerly at the University of Michigan, is now at the Institute for Advanced Study, Princeton.

Loring Wood is now connected with ECA, Mission to France.

CHAPTER NOTES

ALBANY

A seminar in advanced statistics is being offered this autumn and winter by the Albany Branch of the American Statistical Association. The purpose of the advanced course is to provide an opportunity for advanced instruction and study, especially on statistical techniques developed in recent years, to government, industrial and other workers who already have a background in statistics.

The seminar is a combined lecture, teaching and study course, with text and problem assignments. It will start early in October and continue for 12 sessions spaced fortnightly. It will be conducted jointly by two mathematical statisticians, Dr. Joseph Lev of the New York State Department of Civil Service and Dr. William R. Thompson of the New York State Department of Health.

Three courses in statistics were also made available to State employees of the Albany area beginning on October 17, 1949. These courses are offered by the Training Division of the Civil Service Department through the cooperation of the Albany Board of Education and the Albany Chapter of the American Statistical Association.

CHICAGO

The 1949-50 season of activity for the Chicago Chapter has progressed rapidly with plans for ten evening programs and for some 16 informative luncheon discussion programs. An effort has been made to give increased recognition to students in the statistical field in colleges of the Chicago area.

At the first dinner meeting of the 1949-50 season, Dr. Theodore Yntema, Vice President of Ford Motor Company, spoke on "How Statisticians Can Serve Business Better".

On October 6, W. Allen Wallis, Professor of Statistics, University of Chicago, opened the first of a series of three meetings on experimental design held jointly with the local Chapter of the American Marketing Association, with a discussion of "The Importance of Specification in Research Planning".

Robert Porter, Statistician for Ordinance Research Project, University of Chicago spoke on "Analysis of Variance" at the first Statistical Techniques Luncheon on October 18.

Morris Livingston, a widely recognized expert in the interpretation and use of national income and product statistics, and Chief of the National Economics Division of the Department of Commerce, explained the tools he uses in analyzing the business situation and their method of application, at a dinner meeting on November 12.

The Statistical Applications Group, at its joint meeting with the Marketing Association, December 1, heard Charles Dykema speak on "Study Design: Petroleum and America's Farmers." Mr. Dykema, Marketing Analyst, Standard Oil Company, presented the inside story of how a rural market study was designed for a billion-dollar company.

Eugene Pomerance, Account Research Supervisor for McCann-Erickson, designed his talk "Fundamental Concepts of Regression and Correlation" to clarify misunderstanding concerning these techniques.

CENTRAL NEW JERSEY

The Central New Jersey Chapter heard John Q. Stewart, of Princeton University, talk on Demographic Gravitation on October 18. On November 1, Dr. Oskar Morgenstern, Professor of Political Economy at Princeton University, spoke on The Accuracy of Economic Observations.

On November 22 the topic "Objectives and Limitations of Factor Analysis in Scientific Research" was presented by Dr. Paul Horst, Educational Testing Service. Dr. Horst, a former president of the Psychometrika Society, is now a member of the Editorial Board of Psychometrika, and also president of the Division of Evaluation and Measurement of the American Psychological Association.

CENTRAL INDIANA

Members of the Central Indiana Chapter of the American Statistical Association held their first meeting of the 1949-50 season at Purdue University on October 27. Professor W. Allen Wallis of the University of Chicago was the speaker of the evening. Prof. Wallis' topic was "Statistics of the Kinsey Report". Six phases of the report were discussed, i. e., problem covered by the report, general method of investigation, techniques of measurement, cases covered, presentation, and analysis and interpretation. Formal presentation was followed by discussion and questions by Chapter members.

The next Chapter meeting will be early in December. Mr. Robert W. Osler of Rough Notes Company will discuss the application of statistical techniques to life insurance problems.

CONNECTICUT

On November 16, C. I. Bliss, Biometrician, Connecticut Agricultural Experiment Station, and Lecturer in Biometry, Yale University, spoke on "Report and travel notes on the 1949 Statistical Conferences in Switzerland."

Michigan University,
General Library,
Ann Arbor, Michigan.

A/S
FWF

DENVER

On October 13, two of the members of the Denver Chapter—Miss Edna Bigelow, Statistician, Colorado State Department of Revenue, and Mr. L. J. Crampton, Research Associate, Bureau of Business Research, University of Colorado—presented information on "Sales Tax Statistics for Business Use".

On November 10, Dr. Theodore H. Cutler, Chairman of Division of Production and Management, University of Denver, spoke on "Human Relations".

MADISON

Dr. Ewan Clague, Commissioner of Labor Statistics, Department of Labor, in Madison to conduct a series of meetings and conferences with the members of Industrial Commissions and of State Departments of Labor from neighboring states, as guest speaker at the November 8 dinner meeting of the Chapter. Statisticians representing industry, labor, finance, private research, federal and state government, the university and seven foreign nations attended.

Dr. Clague discussed the work of the Bureau of Labor Statistics. He was then persuaded to recount his experiences during his recent visit to the International Office at Geneva, and his investigations of labor productivity in Great Britain and France.

Dr. Clague has a rare faculty for superimposing an interesting and amusing travelogue upon his serious observations, and the Madison Chapter recommends that if any other chapter has an opportunity to impose upon him (reasonably, of course) for a repeat performance, they should not miss. When he is well fed, Dr. Clague is a very hard worker indeed and he is very gracious about assisting in the work of the Association.

Other guests included Walter Keim, Chief of Field Service, Bureau of Labor Statistics, and Adolph O. Berger, Regional Director for the Bureau of Labor Statistics.

NEW YORK

The following officers have been elected to replace those whose terms expired on June 30, 1949 as follows:

President: Waite S. Brush, Manager, Financial and Business Analysis Bureau, Consolidated Edison Co., of N. Y., Inc.

Secretary: Herbert Arkin, Associate Professor of Statistics, School of Business and Civic Administration, City College of New York.

Executive Councillor: R. Parker Eastwood, Associate Professor of Business Statistics, Graduate School of Business, Columbia University.

In June, 1949 a full Chapter Committee on the Federal Censuses was formed to act as a liaison between key consumers of Census data in New York City and the U. S. Bureau of the Census. Officers are: Dr. Neva R. Deardorff, Chairman; Miss Florence E. Cuttrel, Secretary, and Mr. Irving M. Plant, Assistant Secretary.

This new Committee, having broader scope than the former Social Statistics Division's Committee on the 1950 Census required that a new Chairman for Social Statistics be appointed. Dr. Gwendolyn H. Berry of the Community Service Society of New York has accepted the task of Chairmanship.

Frank A. deHermida of West Indies Sugar Company has been appointed Treasurer to serve the balance of Alfred Cahen's term. The Chapter wishes Dr. Cahen great success in his own venture, "Quality Home Products, Inc."

The New York Chapter is exploring the demand for the establishment of a Division specializing in the Technical Analysis of Security and Commodity Price Movements. The purpose of the project via the means of discussion groups and committee activities will be to establish a body of material, under academic and professional auspices, which will describe and explain market phenomena in a scientific, comprehensive and practical manner. By use of quantitative analysis and the use of modern statistical techniques it is hoped that many of the technical problems of the action of prices can be reduced to simple understanding.

Both technical and fundamental analysts who are interested in this proposed Chapter activity are invited to communicate with Irving Sitt of 91 Wall Street, New York 5, N. Y.

OKLAHOMA CITY

The Oklahoma City Chapter of the American Statistical Association met at the Weather Bureau Airport Station on October 6 for a conducted tour of the station. The various types of equipment used as well as the statistical summaries prepared by the Weather Bureau Office were explained. On November 2, Louis Abney described types of marketing surveys carried on by publishing companies. He described in particular the consumers panel conducted by the Oklahoma Publishing Company and a Readers' survey currently in use.

SAINT LOUIS

Committee on School Age Population

At the executive committee meeting on October 19 Edward B. Olds, Kurt Pohlen and Andrew Sarkady were appointed as the nucleus of a committee to meet with the Secretary-Treasurer of the Board of Education to discuss plans for accurately and efficiently determining the school age population of St. Louis. The committee was enlarged to include representatives of the St. Louis Housing Authority, City Plan Commission, St. Louis Health Department and Governmental Research Institute. The first meeting was held on October 20 with the Secretary-Treasurer of the Board of Education and his assistant. Considerable interest was manifested in the following:

- A complete enumeration of the child population before next April.
- Setting standards and controls governing any survey which may be conducted to insure completeness of enumeration.
- Attempting to have the state law amended to permit a sample enumeration in subsequent years.
- Exploring the possibility of a sample survey conducted simultaneously with the complete enumeration in the next few months to obtain information for various governmental and civic agencies in St. Louis.

Anyone who has suggestions for items of information which should be obtained in a possible community survey should communicate with one of the committee members.

Plans for Year 1949-1950

The executive committee met on September 21 to consider plans for the coming season. It was decided to hold monthly meetings of the St. Louis Chapter as close to the first Thursday of each month as possible. For the next few meetings, it was suggested that the program be devoted on alternate months, to problems relating to (1) survey research; (2) census plans.

It was also suggested that plans be explored as to the feasibility of the St. Louis Chapter compiling and publishing a base book of statistical data about the St. Louis area. This would require the cooperation of a number of agencies which compile data. The review of existing data might indicate needed improvements in their compilation as well as new information which should be sought.

A committee was appointed to confer with officials of the St. Louis Housing Authority on problems related to the compilation of data needed to obtain funds for local public housing projects.

